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ABSTRACT

This document reports findings of an audit that examined the New York State Education Department's administration and oversight of school-district construction practices and state building aid. The Department's Bureau of Facilities Planning must approve all school-construction project plans and specifications to ensure that facilities are designed to provide for the health and safety of occupants, and to ensure educational and planning efficiency. The Bureau is also responsible for ensuring that all completed construction projects comply with state building codes. Findings indicate the Bureau's management has not established adequate procedures to ensure that school-building construction projects are inspected for compliance with the state building code. In addition, construction supervision is not always sufficient or adequate, and school districts often occupy newly constructed buildings before receiving a certificate of occupancy. Finally, the Bureau management does not have a system in place to ensure that only eligible construction expenses are approved for state building aid. Twelve recommendations are made. Appendices contain a list of major contributors to the report and the response of department officials. (LMI)

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State of New York
Office of the State Comptroller

Division of Management Audit

Report 93-S-30

The Honorable R. Carlos Carballada
Chancellor of the Board of Regents
The University of the State of New York
State Education Building
Albany, NY 12234

Dear Chancellor Carballada:

The following is our report on the State Education Department's administration and oversight of school district construction practices and State building aid.

This audit was performed pursuant to the State Comptroller's authority as set forth in Section 1, Article V of the State Constitution and Section 8, Article 2 of the State Finance Law.

This audit was prepared under the direction of David R. Hancox, Director of State Audits. Major contributors to the report are listed in Appendix A.

Office of the State Comptroller
Division of Management Audit

October 20, 1993

Executive Summary

State Education Department Oversight of School District Construction Projects

Scope of Audit

New York State school districts can receive State building aid for construction and rehabilitation of school buildings and bus garages. Building aid is intended to ensure that school districts provide suitable and adequate facilities to accommodate district programs and State Education Department (Department) mandates. State building aid payments average about $300 million annually.

The Department's Bureau of Facilities Planning (Bureau) must approve all school construction project plans and specifications to ensure that facilities are designed to provide for the health and safety of occupants, and to ensure educational and planning efficiency. The Bureau is also responsible for ensuring that all completed school construction projects comply with the New York State Fire Prevention and Building Code (building code). School districts are responsible for overseeing project construction.

Our audit addressed the following question regarding the Department's oversight of school district construction projects:

- Does the Bureau effectively monitor school district construction projects to ensure that suitable and adequate facilities are constructed in a cost-effective manner?

Audit Observations and Conclusions

We found that the Bureau needs to strengthen its procedures to ensure that school building construction projects are inspected for compliance with the State building code. Based on our review of building projects totaling about $11 million at four school districts, we found insufficient evidence that required inspections of foundations, structures, and plumbing and mechanical systems were made. For example, at the Hyde Park Central School District, there was no documentation that the required inspections were completed, with the exception of the project's electrical system. We found similar problems at the Queensbury Union Free School District. Management there told us that inspections were not documented unless significant deficiencies were found. However, without documentation, there is no evidence that all required inspections were completed. As a result, there is an unacceptable risk that school buildings do not meet health, safety and efficiency requirements. (see pp 5-9)

Although the Education Law requires professional supervision of all school building construction projects, we found that construction supervision was not always sufficient or adequate. For example, based on our observations at the four school districts that we visited, architects generally visit project sites every two weeks. Because of the extent of construction that may occur in a two-week period, we question whether this is frequent enough to adequately monitor the quality of much of the work that is done. Furthermore, architects must often rely on a clerk of the works to provide most of the data necessary for project monitoring. However, at three of the four districts we visited, we found that the clerks did not adequately document the construction process according to the guidelines prescribed by the American Institute of Architects. Consequently, we believe the Bureau and school district managers do not have adequate assurance that construction projects are completed in accordance with the building code. (see pp 9-11)

To ensure that fire and safety issues have been properly addressed, school districts must obtain a certificate of occupancy from the Bureau before a new building or addition may be occupied. Yet, we found that school districts often occupy newly constructed buildings and additions before receiving a certificate of occupancy. For example, of 18 completed and occupied projects that we reviewed, 12 did not have a valid certificate of occupancy prior to use. Bureau management indicated that they are aware that many districts occupy their buildings prior to obtaining a certificate of occupancy; however, they have not developed procedures to identify these districts so that corrective actions can be taken. (see pp 11-13)

School districts must submit a final cost report for each project to the Bureau. The Department uses the final cost report to determine the total amount of building aid that a district should receive for a project. However, Bureau management does not have a system in place to ensure that only eligible construction expenses are approved for State building aid. For example, a project at the Hyde Park Central School District exceeded the voter-approved budget by $241,000. We found that district managers inappropriately transferred these excess costs to a second project, which improperly increased the amount of building aid for that project by $140,000. Yet, Bureau staff did not detect that the transferred costs were not related to the second project. Some of the other school districts that we visited also included ineligible expenses on their final cost reports. (see pp 15-18)

Comments of Department Officials

Department officials agreed with 9 of our 12 recommendations. The officials indicated that they have taken or will take actions to implement the recommendations they agreed with.

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Introduction

Background

Building aid for approved capital costs and debt service is available to New York State school districts for constructing school buildings and bus garages. State building aid is intended to help school districts and Boards of Cooperative Educational Services (BOCES) provide suitable and adequate facilities to accommodate district programs and mandates of the State Education Department (Department). To be eligible for aid, projects must receive Department approval and construction costs must exceed $10,000.

Before proceeding with a construction project, school districts must request authorization from the district voters or the Board of Education (in city school districts). When projects are approved, the voters or the Board of Education agree to a maximum budget which the district cannot exceed without formal approval.

The Department's Bureau of Facilities Planning (Bureau) is responsible for assessing whether proposed construction projects are eligible for State building aid. When submitting projects for Bureau approval, school districts must also submit long-range plans which appraise district program requirements, grade level patterns, present and projected enrollments, space use and capacity of existing facilities. The Bureau uses information in the long-range plans as a basis for assessing the propriety of the scope of work and eligibility for State building aid.

After construction projects are authorized, school districts must submit plans and specifications to the Bureau for approval. Plans and specifications are reviewed by a Bureau architect or engineer for compliance with the New York State Uniform Fire Prevention and Building Code (building code). Compliance with the building code is intended to provide a basic minimum level of protection from the hazards of fire and inadequate building construction. If no deficiencies are found, the project is approved; the Bureau issues a building permit and construction may begin. (Note: Although the New York City Board of Education receives State building aid, the State Education Law exempts it from the Bureau's project review and approval process.)

After project approval, the Bureau's involvement during construction is limited to reviewing change orders for compliance with the building code. In addition, Bureau staff ensure that change orders

do not cause the project's estimated costs to exceed the maximum budget.

School district officials are responsible for the overall administration of all building construction projects. This includes selecting an architect to design the project, bidding the construction contracts, and contracting with a clerk of the works (clerk) or a construction manager to represent the district and provide technical oversight of building projects.

After construction has been completed, a school district must obtain a certificate of occupancy from the Bureau before it may use the new building or addition. Before issuing a certificate of occupancy, the Bureau requires district officials to submit a fire safety inspection report and a certificate of substantial completion, which is the project architect's confirmation that project construction conforms with approved plans and the building code.

State building aid payments for approved projects are made annually during the course of construction on the basis of expected costs at the time of contract signing. Upon completion of construction, school districts have up to five years to submit a final cost report to the Bureau. This report is used to ensure that project costs did not exceed the authorized budget and to identify the total expenditures which are eligible for State building aid. After the final cost report is submitted, adjustments are made, if necessary, to future State building aid payments.

The daily operations of the Bureau are directed by the Chief of Facilities Planning. At the time of our review, the Bureau had a staff of seven architects/engineers and seven project managers. During the 1991-92 school year, the Bureau approved about 1,600 projects, which involved renovations, alterations and additions to existing buildings as well as construction of new buildings. In prior years, about 2,500 projects normally received approval. State building aid payments average about $300 million annually. A large portion of the State building aid paid to school districts in any given year relates to projects that have been completed in prior years.

Audit Scope, Objectives And Methodology

We audited the efficiency and effectiveness of the Department's procedures to fund and monitor school district construction projects for the period July 1, 1990 through June 30, 1992. The primary objectives of our performance audit were to assess the Department's oversight of capital construction projects and to determine whether any inappropriate costs have been included in district requests for State aid.

To accomplish our objectives, we reviewed appropriate laws, regulations and Bureau procedures for monitoring projects, compiled and analyzed the Bureau's data, and visited four school districts to determine how they monitored construction projects and how they accounted for costs. The four districts that we visited were the South Colonie Central School District, the Hyde Park Central School District, the Port Jervis City School District, and the Queensbury Union Free School District. The total reported cost of the projects we reviewed at these districts was about $11 million.

We conducted our audit in accordance with generally accepted government auditing standards. Such standards require that we plan and perform our audit to adequately assess those Department operations included within the audit scope. Further, these standards require that we understand the Department's internal control structure and compliance with those laws, rules, and regulations that are relevant to the Department's operations which are included in our audit scope. An audit includes examining, on a test basis, evidence supporting transactions recorded in the accounting and operating records and applying such other auditing procedures as we consider necessary in the circumstances. An audit also includes assessing the estimates, judgments and decisions made by management. We believe our audit provides a reasonable basis for our findings, conclusions and recommendations.

We use a risk-based approach when selecting activities to be audited. This approach focuses our audit efforts on those operations that have been identified through a preliminary survey as having the greatest probability for needing improvement. Consequently, by design, finite audit resources are used to identify where and how improvements can be made. Thus, little audit effort is devoted to reviewing operations that may be relatively efficient or effective. As a result, our audits are prepared on an "exception basis." This report, therefore, highlights those areas needing improvement and does not address activities that may be functioning properly.

Internal Control and Compliance Summary

Our consideration of the Department's internal control structure focused on administrative controls, which are defined as the procedures that are concerned with the decision making processes leading to management's authorization of transactions. These controls pertain to the monitoring of construction projects, ensuring that necessary inspections take place, ensuring that project costs are reported accurately, and ensuring that school districts do not occupy buildings until they are inspected. Our audit identified some significant weaknesses in these areas, which are described throughout this report.

Our audit also identified instances of noncompliance with relevant laws, rules and regulations. This noncompliance is described throughout the report.

Response of Department Officials to Audit

Draft copies of this report were provided to Department officials for review and comment. Their comments have been considered in preparing this report and are included in Appendix B.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Commissioner of Education shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

Construction Inspection and Supervision

Section 381 of the Executive Law requires cities, towns and villages in New York State to administer and enforce the building code. However, the Executive Law allows the Secretary of State to authorize exceptions. One such exception establishes the Department's responsibility for administering and enforcing the building code for any construction projects undertaken by school districts and BOCES. As a result, local government building inspectors have no jurisdiction over school building projects and do not perform construction inspections.

The New York State Department of State, Office of Fire Prevention and Control, has issued regulations intended to provide assurance that buildings are inspected for compliance with the building code. In addition, the State Education Department has issued guidelines which expand on the regulations and call for construction inspections at such times as will permit observation of excavations, foundations, superstructures, plumbing, electrical systems, and mechanical systems. Section 7209 of the Education Law requires professional supervision of all construction projects which affect the safeguarding of life, health and property.

We found that Bureau management needs to strengthen its procedures to ensure that construction inspections are done. We also found that school districts need to adequately document inspections and ensure that construction supervision is sufficient. Additionally, we found that school districts sometimes occupy new or renovated buildings before obtaining a valid certificate of occupancy. As a result, we believe there is an unacceptable risk that some school buildings do not meet health, safety and efficiency requirements.

Bureau Oversight and Monitoring

Department of State regulations require the Education Department to have adequate documentation that required building construction inspections have been done. However, we found that Bureau management had not established adequate procedures to ensure that these inspections are performed and documented. The Bureau does not require school districts to submit evidence that construction inspections were performed. In addition, Bureau management has not provided any guidance to school districts concerning the type of documentation needed for inspections. Each school district's architect decides what inspection documentation, if any, to prepare and maintain.

Bureau management informed us that they rely on certificates of substantial completion as evidence that the required construction inspections were done. According to Bureau management, these substantial completion reports, which are signed by the school district's architect, certify that the construction has been completed according to the contract documents and the building code. However, as discussed in the next section of our report, we found there is little documentation that construction inspections are being done. Consequently, we believe Bureau management cannot rely on substantial completion reports, as evidence of required construction inspections.

We also found that the Bureau's review of change orders needs improvement. Department regulations require that all construction change orders (changes to plans and specifications) must be reviewed and approved by Bureau staff. When staff review a change order they determine whether the proposed change is compatible with the original building permit and whether the change is in compliance with the building code. According to Bureau management, however, school districts generally submit their change orders after the related work is completed. Thus, the Bureau's review of change orders is done after the actual work is performed pursuant to the order.

In our draft report we recommended that school districts submit change orders for review prior to the work being done. Department officials disagreed with the recommendation, as presented in our draft report. Officials stated that there is no practical way to review and approve change orders before the work is done without causing serious construction delays. We agree that many change orders involve relatively minor changes which do not warrant prior approval. Accordingly, we have amended the recommendation to suggest that SED's prior review and approval be limited to major change orders, such as those involving significant adjustments or amendments to the approved plans and specifications.

Recommendations

1. Establish procedures to ensure that all required construction inspections are completed.

2. Require that school districts submit change orders, which involve significant changes to approved plans and specifications, for review prior to the work being done.

Districts' Documentation of Construction Inspections

During our review of projects at the four school districts, we found little or no written evidence that required construction inspections were done, that the inspections properly identified deficiencies, and that deficiencies identified in completed inspections were corrected. As a result, both Bureau and school district officials have inadequate assurance that buildings were constructed in conformance with plans and specifications and the building code. The following are examples of the problems we found.

At the Hyde Park Central School District, we reviewed an addition project involving the construction of six classrooms at a reported cost of $1,025,000. The project was approved in August 1989 and was substantially complete in August 1990. We found no documentation that the required inspections were completed, with the exception of the electrical system. School district officials contended that a daily log maintained by the clerk and minutes of meetings among the school architect, clerk and construction contractors provide adequate evidence that the necessary inspections were completed.

However, we found that the log and minutes did not provide sufficient evidence that inspections took place. The clerk's log did not provide detailed observations of inspections and indicated that he was not present to observe all inspections. For example, he was not present for a test of heating system lines. About three weeks later, the log notes that a leak was detected in the heating lines and that work was initiated to correct the problem. Also, job meeting minutes generally documented only project scheduling decisions and made no mention of inspections unless a deficiency was found. There often were no entries for follow-up inspections to confirm that the noted deficiencies were corrected.

We found similar problems at the Queensbury Union Free School District. We reviewed three addition projects which included the construction of: eight elementary school classrooms at a reported cost of $785,800 (approved in April 1988 and substantially complete in May 1989); eight middle school classrooms and two industrial arts rooms at a reported cost of $731,000 (approved in April 1988 and substantially complete in May 1989); and twelve high school classrooms at a reported cost of $1.5 million (approved in June 1988 and substantially complete in August 1989). Although the architect's field reports document a plumbing inspection, they do not reference any of the other required inspections (for excavations, foundations, superstructures, electrical systems and mechanical systems). District officials told us that inspections were not documented unless significant deficiencies were found. Since there is no documentation, they assume that the buildings were constructed to specifications and that all required inspections were made. We believe, because of the

absence of documentation, that neither the Department nor the District has adequate assurance that any of the required construction inspections were done, and that identified deficiencies were corrected.

At the Port Jervis City School District, we reviewed an addition project at the Hamilton Bicentennial Elementary School which involved the construction of 17 classrooms, a gym and a kitchen at a reported cost of more than $3.5 million (approved in September 1988 and substantially complete in August 1989). We found no specific entries in the clerk's daily logs that the required construction inspections were done. The architect, clerk and construction contractors held bi-weekly job meetings. However, the minutes of these meetings did not mention inspections and generally dealt with scheduling and coordinating.

We noted specific construction deficiencies in the Port Jervis elementary school addition which should have been identified by inspections. During our review, district staff pointed out numerous deficiencies in the new kitchen. Serving counters were built too high for the school's younger students. Consequently, according to district officials, extra kitchen staff are needed to place food on the students' trays. Also, water comes out of an unconnected pipe and falls to a drain located on the floor under one of the kitchen sinks. District officials indicated that this is not in compliance with the building code.

In response to our draft report SED officials indicated that planning inefficiencies, such as the serving counter height and size of chalkboards in the Port Jervis elementary school addition, are beyond the scope of review of the Education Department. Rather, SED officials said that such conditions are the result of improper direction on the part of the district as to what they want, or poor communication between the architect with the district as to what was to be furnished. They added that the open-air drain may have been required by the Health Department regulations, despite what district officials may have indicated.

Recommendations

3. Provide clarification to school districts concerning the documentation of required construction inspections.

4. Periodically verify that school districts have appropriate documentation to support the completion of construction inspections.

Construction Supervision

All construction projects must be supervised by a licensed architect or engineering firm. In accordance with Department guidelines, the project architect should make periodic visits to the job site to determine whether the work being completed conforms with contract documents. The project architect should identify defects and deficiencies of construction contractors.

School districts routinely hire a construction manager or clerk to provide extensive project oversight. Although construction managers and clerks have significant oversight responsibilities, their oversight is not intended to substitute for the architect's professional supervision. School district architects generally rely on the clerk to observe project progress and inspections and to provide relevant information concerning construction work.

Based on our observations and discussions with officials at the school districts that we visited, architects generally visited construction projects sites every two weeks. However, because of the extent of construction that may occur in a two-week period, we question whether this is frequent enough to monitor the quality of much of the work that is done. Architects rely on clerks to provide most of the data necessary for project monitoring. However, we found the clerks did not adequately oversee the projects. Consequently, we believe that Bureau and school district officials do not have adequate assurance that construction projects are completed according to the contracts.

For example, in November 1989, the architect for the Hyde Park school district project, involving the construction of six classrooms, rejected shop drawings (shop drawings are the detailed technical illustrations of how specific construction components will be performed) submitted by the general contractor because the drawings did not sufficiently detail the method for erecting structural steel. However, because of scheduling concerns, the architect allowed the general contractor to begin erecting the steel, with the understanding

that shop drawings would soon be submitted later and that any re-work would be an expense of the general contractor.

The general contractor, however, did not submit the revised shop drawings to the architect until the steel was already in place. In addition, the architect believed that the steel connection details in the shop drawings were not prepared under the supervision of a licensed professional engineer. As a result, the architect required the general contractor to arrange for an independent physical inspection of the structural steel.

Subsequently, the independent testing firm inspected the steel connections and found the overall quality of welding to be average, with about ten suspect connections. The testing firm recommended some additional bracing of the connections. Records indicate that the architect accepted the structural steel almost five months after it was erected.

In addition, we found that logs maintained by the clerks at Hyde Park, Queensbury and Port Jervis did not adequately document the construction process in accordance with guidelines prepared by the American Institute of Architects (AIA). These guidelines require the clerk to maintain a daily log of job site activities including: hours on the job site, weather conditions, visiting officials, daily activities and decisions, general observations, and observations of test procedures. The following summarizes our findings at the three districts.

- The clerk's log for the Hyde Park school district project did not include some of the data required by the AIA. The clerk rarely provided detailed information about daily activities, and noted tests or inspections only if deficiencies were found. There was usually no documentation that deficiencies were corrected.

- At the Queensbury Union Free School District, the logs prepared by the clerk did not contain all the required information and provided few, if any, details of the work done on a daily basis. District personnel told us that the clerk's logs are used to identify the work done by the various construction contractors in the event that the district was over-billed by a contractor. In our opinion, the logs for these projects did not even provide enough information to be used for this purpose. The clerk rarely provided enough detail to determine what work was done on any given day. For example, a typical entry in the clerk's log was "plumbing - piping" to describe the work being done by the plumbing contractor.

- At the Port Jervis City School District, the clerk's log for more than the last four months of the project was not submitted to either the

architect or the district. During this period, the district hired the clerk to supervise a second project. These two job sites were several miles apart, and as such, the clerk was unable to provide full-time supervision at either location. The architect made bi-weekly visits to the job site and did not increase the amount of on-site supervision after the clerk began working on the second project. Given this lack of supervision, we question how the architect can rely on the clerk's oversight to attest to the quality of the construction done. Consequently, both the school district and the Bureau do not have adequate assurance that the project was completed according to the contract.

In their response to our draft report, Department officials disagreed with our recommendation to establish guidelines for the effective supervision of construction projects. They stated that the establishment of guidelines for effective supervision is beyond the expertise and purview of the Department. Officials also stated that there is not a universal consensus of what constitutes appropriate construction supervision. Nonetheless, we believe that inadequate supervision contributed to the problems cited in the report and that some guidance prescribing a minimum level of acceptable supervision would help to preclude such problems.

Department officials agreed with our recommendation to verify that architects, construction managers, and clerks properly monitor construction projects. Officials stated that they will require construction managers, architects, and clerks to sign statements that they have complied with the State laws and regulations which address professional supervision and inspection of construction projects.

Recommendations

5. Establish guidelines for the effective supervision of construction projects, including (but not limited to) the frequency of site visits and the documentation of all supervisory activities.

6. Periodically verify that architects, construction managers and clerks are properly monitoring construction projects.

Certificates of Occupancy

To ensure that fire and safety issues have been properly addressed, school districts must obtain a certificate of occupancy from the Bureau before a new building or addition can be placed into service. Beginning in November 1991, Bureau procedures required school

districts to submit certificates of substantial completion and fire safety inspection reports of additions or new buildings before certificates of occupancy would be issued. However, we found that school districts often occupy newly constructed buildings and additions before receiving a certificate of occupancy. When districts fail to submit the substantial completion and fire safety inspection reports needed to obtain a certificate of occupancy, the Bureau does not have the necessary assurance that completed projects comply with approved plans and the building code prior to being occupied by staff and students.

We selected a sample of 25 building projects that were approved for construction by the Bureau during the 1991-92 school year to determine whether the Bureau issued a valid a certificate of occupancy prior to the building being occupied. Of these 25 projects, 18 were completed and occupied while the remaining 7 were either not complete or were not being occupied. Of the 18 completed and occupied projects, the Bureau had issued certificates of occupancy for only 6 facilities before they were occupied by staff and students. Consequently, 12 buildings were occupied without valid certificates of occupancy.

This can happen in one of two ways: either a district occupied a building without obtaining a certificate of occupancy or it received a certificate of occupancy before submitting the appropriate documentation. For example, a project in the Whitesboro school district's junior high school was completed on August 1, 1992, and the building was occupied in September 1992. However, district officials had not submitted a certificate of substantial completion to the Bureau, and therefore had not received a certificate of occupancy as of November 1992. At the Saranac Lake central school district, an elevator project was completed in June 1992. The Bureau issued a certificate of occupancy in July 1992 (pursuant to the annual fire safety inspection), even though as of November 1992, it had not received a certificate of substantial completion from the district.

This problem exists, at least in part, because district officials are often uncertain of when they are required to obtain a certificate of occupancy. Although a district must obtain a certificate of occupancy to obtain new construction, it must also obtain one pursuant to the annual fire safety inspection of existing buildings. However, the form used to obtain the certificate of occupancy does not clearly indicate whether it is for the annual certification or for new construction. Consequently, district officials may incorrectly believe that a certificate of occupancy that was issued as a result of the fire safety inspection of an existing structure, pertains to the new construction.

Bureau management indicated they are aware that many districts occupy their new buildings and additions prior to obtaining a certificate of occupancy. However, Bureau management has not developed control procedures to identify districts that are not complying with this regulation so that appropriate action can be taken. For example, Bureau staff do not periodically check ongoing projects to determine whether they have been completed and are being occupied without valid certificates of occupancy.

Recommendations

7. Ensure that district construction projects are not being occupied without the required certificates of occupancy, by periodically reviewing listings of ongoing projects and following-up with district officials, as appropriate.

8. Ensure that school districts are aware of the correct procedures to follow for obtaining a certificate of occupancy prior to occupying new construction.

Review of Project Costs

The Department requires school districts to submit a final cost report to the Bureau after construction projects are completed. This report includes an accounting of all sources of funding for each project, as well as a summary of all expenditures. The Department's Office of State Aided Programs relies on the Bureau-approved final cost report to make the final determination of the total amount of building aid that a district should receive. We found, however, that the Bureau does not ensure that school districts include only related and eligible construction expenses on the final cost report. As a result, there is substantial risk that State building aid payments could be made for ineligible expenses.

Project Costs and Approved Limits

The Education Law requires that building projects in non-city school districts be subject to the approval of school district voters. When approving a project, the voters authorize a maximum amount that the school district may spend. Project costs cannot exceed the approved project budget unless district officials obtain further approval from the voters. Project expenses that exceed the voter-approved budget are not eligible for State building aid.

Bureau staff review final cost reports to ensure that claimed expenditures do not exceed the maximum approved amounts. However, we found that they do not have sufficient information available to identify when districts exceed the voter-approved budgets and include the excess expenses on the final cost report of another construction project.

For example, the voters of the Hyde Park Central School District authorized a maximum budget of $1,025,000 for an addition and alteration to an elementary school. The completed project exceeded the voter-approved budget by about $241,000. However, voter approval was not obtained for the additional costs. Instead, we found that district managers inappropriately transferred the excess cost from the elementary school project to an ongoing district-wide alteration project. The expenses transferred included: all clerk fees; part of the architect fees; miscellaneous charges for advertising, surveying and testing; and portions of the construction contracts.

Had district officials correctly charged these expenditures to the addition project, the $241,000 would not have been eligible for State building aid because the project would have exceed the voter-approved budget. By transferring these excess costs to another project, district officials inappropriately increased the amount of total

building aid for the addition project by over $140,000 ($241,000 x building aid ratio). District officials told us that they transferred these costs because a portion of the work done at the elementary school was originally part of the district-wide alteration project. However, our review of the Bureau approved plans and specifications shows that this work was approved as part of the elementary school addition, not the district-wide alteration.

Bureau staff did not identify the transfer of these expenditures during their review of the district's final cost report for the project. This resulted, in part, because Bureau staff do not have copies of construction contracts when they review final cost reports, and therefore, they cannot compare final cost report amounts to actual contracts.

In response to our draft audit report, SED officials disagreed with our recommendation that school districts should be required to submit appropriate documentation to support building costs reported on the final cost reports. SED officials stated that current staffing levels and the expectation for no increase in staff to review final cost reports would make it pointless for the Department to require districts to submit voluminous quantities of receipts and invoices. As an alternative, if additional funding can be obtained, SED officials propose to contract with independent auditors to conduct desk or field audits of up to 10 projects annually.

We agree that it would be pointless for the Department to require school districts to submit documentation which would not be reviewed. However, this was not the intention of our initial recommendation. We have clarified our recommendation to say the Department should require school districts to submit documentation to support the major building component costs included on the final cost reports. In this way, the Department may be better able to identify excessive or unrelated costs.

Recommendation

9. Require school districts to submit appropriate documentation to support the major building component costs that are included on the final cost reports.

Aid for Unrelated and Unnecessary Expenses

The Education Law identifies expenditures eligible for State building aid as the costs of new construction, reconstruction, and original equipment and furnishings. Professional fees and other incidental costs associated with construction are also allowable. Bureau staff review final cost reports to determine whether all claimed expenses are eligible for State building aid, but do not determine whether the claimed expenses are consistent with the work necessary to complete the project.

During our reviews of school district projects, we identified expenses on the districts' final cost reports which were inconsistent with the project. Yet, there was no evidence that Bureau staff questioned these costs. We found that procedural weaknesses prevent Bureau staff from identifying school districts which include expenses in the final cost reports that are not related to construction work done. The following examples show that school districts can increase the amount of State building aid they receive by including costs that are not related to the construction project on the final cost report.

We reviewed the gymnasium construction project at the South Colonie Central School District that had a reported cost of more than $3.5 million (approved in September 1986 and substantially complete in September 1987). We found that $6,000 of expenditures for science equipment were included on the final cost report. However, the plans and specifications approved by the Bureau did not include any work involving science rooms. District managers indicated that the work on science rooms was part of another project and that the science equipment expenses were inadvertently charged to the gymnasium project. If the science room project had exceeded approved costs, this transaction would have inappropriately increased State building aid paid to the district. District managers stated that there was no overpayment of State building aid for these projects, because the costs for the science rooms were approved by the Department, and thus were eligible for building aid.

We also identified unrelated expenditures charged to the elementary school addition project at the Port Jervis City School District. District managers charged over $17,000 of the clerk's salary relating to a high school addition project to the elementary school project. In addition, expenditures for equipment and furnishings which were not part of the addition were also charged to the project and shown on the final cost report, including about $12,000 for computer room air conditioning and for library tables and chairs. In this case, the unrelated expenses did not increase the amount of State building aid received by the district because the cost of the project significantly exceeded the maximum amount eligible for aid.

State building aid payments to school districts can also be inflated by construction or planning inefficiencies. For example, the original plans and specifications for the Port Jervis elementary school addition project allotted only four feet of space for chalk boards in each classroom. These chalk boards were installed by the contractor at a cost of $15,000. Upon installation, teachers complained that the chalk boards were not useful because they were too small. Larger chalk boards were then installed at an additional cost of about $8,000.

Even though some of the excessive expenditures we identified did not increase the amount of State building aid school districts received, there is a significant risk that the Department is providing building aid for ineligible expenditures. Currently, school districts are not required to submit documentation to support the reported expenditures, and Bureau staff do not make field visits to review the documentation supporting expenditures. As such, Bureau staff cannot identify improper expenditures during their review of district final cost reports. Although the Department may not have sufficient resources to review supporting documentation for all building aid claims, we believe that reviews of selected claims would help the Department to better identify districts which include unrelated or unnecessary expenses on their final cost reports.

In response to our draft report SED officials agreed with our recommendation to recover State building aid payments made to school districts for non-eligible expenses, but stated that the recommendation is unnecessary because school districts currently report eligible and ineligible expenses on the final cost report. However, as illustrated in our report, the Department can not make adjustments to final cost reports when school districts incorrectly report ineligible costs as eligible costs. Further, it is the intent of our recommendation that the Department recover the overpayments made to the districts we visited and noted in our report.

Recommendations

10. Develop procedures to periodically review the supporting documentation for selected districts' claims to ensure that unrelated and unnecessary expenses are not claimed for reimbursement.

11. Recover State building aid payments made to school districts for non-eligible expenses.

Procurement of Professional Services

School districts must obtain various professional services to complete construction projects. For example, supervision must be provided by licensed architects or engineers. Other types of professional services often include legal services and a clerk of the works for day-to-day construction supervision. Since architectural services, at the school districts that we visited, were 5 percent or more of construction costs (which frequently total millions of dollars), professional services for school district construction projects can often cost several hundreds of thousands of dollars.

Although the General Municipal Law does not require localities to competitively bid professional services, we believe that it is in the public interest for districts to secure such services at the most reasonable price. In our judgment, the magnitude of the costs for these services requires some form of competition to ensure that the districts' costs are reasonable. Competition also helps to guard against favoritism and fraud. A request-for-proposal process, for example, would permit contracts to be negotiated based on a contractor's demonstrated competence and qualifications and at fair and reasonable fees. Effective January 1, 1992, the General Municipal Law requires local governments, including school districts, to adopt internal policies and procedures which govern the procurement of goods and services which are not required to be formally bid.

We found that school districts generally do not solicit proposals or bids when procuring professional services. Of the four school districts that we visited, only Port Jervis considered price when selecting an architect. The other three districts selected architectural firms on the basis of their prior experience with a firm. Likewise, only one district (Hyde Park) solicited bids when selecting a clerk of the works. The other districts based their selection on interviews, resumes and past experience with the clerk. The cost of professional services for the projects we reviewed in the four districts exceeded $1 million.

We also sent survey questionnaires to school districts which had building projects approved during 1991 to determine how they acquired professional services. Of the 42 districts that responded, 26 (62 percent) indicated that they did not solicit price proposals when selecting an architect. Interviews and past experience with an architectural firm were the basis of selection for the majority of school districts.

However, officials from 16 of the districts that we surveyed indicated that they did use some form of competition to obtain professional services. Use of a request-for-proposal process, sometimes in conjunction with consultant interviews or presentations, helped assure district officials that good design services were obtained at reasonable costs. We believe that general use of competition to obtain consultant services would help districts statewide to administer large capital projects in the most cost-effective manner.

Recommendation

12. Encourage school districts to use some form of vendor competition when obtaining professional services for construction projects.

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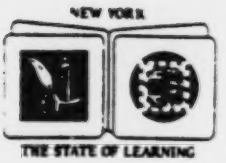

THE STATE EDUCATION DEPARTMENT

EXECUTIVE DEPUTY COMMISSIONER OF EDUCATION
THE NEW YORK STATE EDUCATION DEPARTMENT
ALBANY NEW YORK 12234

May 28, 1993

Mr. David R. Hancox
Director of State Audits
Office of the State Comptroller
Division of Management Audit - 13th Floor
Governor Alfred E. Smith State Office Building
Albany, NY 12236

Dear Mr. Hancox:

Thank you for the opportunity to comment on the draft audit report (93-S-30), on the State Education Department's administration and oversight of school district construction practices and State building aid.

We appreciate the attention your staff has given to analyzing our operations. I trust that this response will be helpful in the preparation of the official audit report and that the report will reflect the clarification we have sought to provide.

Sincerely,

Thomas E. Sheldon

Thomas E. Sheldon

Attachment

BEST COPY AVAILABLE

RESPONSE OF THE NEW YORK STATE EDUCATION DEPARTMENT TO THE DRAFT AUDIT REPORT (93-S-30) OF THE OFFICE OF THE STATE COMPTROLLER ON THE DEPARTMENT'S ADMINISTRATION AND OVERSIGHT OF SCHOOL DISTRICT CONSTRUCTION PRACTICES AND STATE BUILDING AID.

The format of this response, generally, is comment on the stated recommendations followed by comment on identified parts of the narrative which precedes the recommendations.

page 1 - Introduction -- Background - 4th paragraph -

Education Law, Section 408, not Regulations of the Commissioner, exempt New York City from the bureau's plan review and approval process.

Recommendation #1. Establish procedures to ensure that all required construction inspections are completed.

We agree with the recommendation. However, while 19NYCRR444.3d, lists basic building systems which must be inspected; it does not prescribe specific components of required inspections. Such specific inspections are a function of the size and scope of a project and the type of work being done. In fact, the current information in the Department's Instruction Guide for Obtaining a Building Permit, which you received for information during the audit, is more precise than 19NYCRR444.3d, i.e., required inspections are those inspections necessary to allow certification that work is in accordance with the contract documents. We will develop a procedure to ensure that required construction inspections are completed. Please see Recommendation #3.

Recommendation #2. Require that school districts submit change orders for review prior to the work being done.

We disagree with the recommendation. In the construction industry it is not uncommon for change order work to be negotiated and to be completed before the actual change order is produced and signed by all parties. In this way, work does not stop while the change order is negotiated. To do otherwise would appreciably delay the progress of the work. There is no realistic, practical way for Department staff to review and approve change orders before the work is done without causing serious construction delays. Change orders relate to agreed upon changes to contractual relationships among the district (the owner), the architect or engineer, and the contractor doing the work, and as such, change orders must be executed (signed) by all three parties; this occurring before being submitted to the Department. The Department has no contractual relationship with any of the signatories. The Department does not make any determination as to whether a change order is necessary; that being the responsibility of the board of education. To effect this recommendation would require a significant increase in staff and would not be a cost effective use of tax dollars.

page 6, second paragraph - Review of change orders is not perfunctory. Each change order (over $5,000 in a year having 1,600± project approvals) is reviewed for its effect on building aid, whether it is consistent with Comptroller's Opinion #60-505, and whether it is consistent with the Uniform Fire Prevention and Building Code.

Recommendation #3. Provide clarification to school districts concerning the documentation of required construction inspections.

We agree with the recommendation. We will develop concise information for school districts as well as their architects and engineers apprising them of the construction inspections required by 19NYCRR444.3d and a system of recording such activities required by section 444.3e. The instructions pertaining to construction inspections will augment the current information in the Department's Instruction Guide for Obtaining a Building Permit and Guide to Administrative Procedures which you received for information during the audit. The system of recording construction inspections will include requiring completion of an instrument which verifies that individual inspections were conducted.

Additionally, we propose to advise school districts and their design professionals, at the time the Building Permit is issued, of a series of assurances they will be expected to sign at the time of substantial completion. These assurances will address issues such as timely submission of change orders, professional supervision pursuant to Section 7209 of the Education Law, construction inspections, pursuant to 19NYCRR444(d), and the necessity of obtaining a Certificate of Occupancy prior to occupying a new building or addition.

Recommendation #4. Periodically verify that school districts have appropriate documentation to support completion of construction inspections.

We agree with the recommendation. We will verify that construction inspections were performed by requiring submission of the instrument described in Recommendation #3.

page 8, first full paragraph - Planning inefficiencies such as the serving counter height and size of chalkboards (page 15), are beyond the scope of review of the Education Department. Rather, such conditions are the result of improper direction on the part of the district as to what they want, or poor communication between the architect with the district as to what was to be furnished. The open-air drain may have been required by the Health Department regulations, despite what district officials may indicate.

Recommendation #5. Establish guidelines for the effective supervision of construction projects, including (but not limited to) the frequency of site visits and the documentation of all supervisory activities.

We disagree with the recommendation. Establishment of related guidelines is beyond the expertise and purview of the Department. There are many publications which discuss the many and varied aspects of construction supervision. Supervisory tasks are objective, while the means of accomplishing them are subjective. There is not universal consensus of what is appropriate and necessary. Further, there is a difference between the professional supervision required by Section 7209 of the Education Law and the construction inspections required by 19NYCRR444. The frequency of site visits relates to professional liability and is a contractual consideration.

The treatise on construction supervision is presented to school districts in the Department's Guide to Administrative Procedures. We believe this is practical, basic information on the state of construction supervision and is clear. Documentation of supervisory activities insofar as they pertain to construction inspections are described in Recommendation #3.

Recommendation #6. Periodically verify that architects, construction managers and clerks are properly monitoring construction projects.

We agree with the recommendation. We will verify that architects, construction managers and clerks are monitoring construction projects by requiring the instrument described in Recommendation #3.

page 8 and 9, re: construction supervision - As stated in Recommendation #5, construction supervision is imprecise. Likewise the roles of the design professional, a construction manager and an on-site, full time project representative, often called the clerk of the works, are not understood, especially by persons not well acquainted with the complexities of the construction industry. The Department's Guide to Administrative Procedures attempts to give lay persons such as board of education members and the public some understanding of what is involved. Particularly, the section on Clerk of the Works is most informative and augments guidelines published by the American Institute of Architects.

Consequently, we cannot agree that the examples cited on these pages are examples of improper supervision. Rather, it seems that in the case of the steel at Hyde Park, the architect acted reasonably to expedite the progress of the work in the face of extenuating circumstances. The finding of 10 suspect welded connections is the very reason welded connections are tested. The suspect connections were not a function of delayed shop drawings.

page 10, last paragraph - At several points in the audit, and specifically here with respect to the Port Jervis City School district, there is the thought that

neither the district nor the Department has any assurances that projects were properly completed. However, there is no indication in the report of any evidence of structural deficiencies, unsafe conditions, defective materials or improper or unacceptable cosmetic results. At least the construction supervision process is apparently successful to this extent.

Recommendation #7. Ensure that district construction projects are not being occupied without the required certificates of occupancy, by periodically reviewing listings of ongoing projects and following-up with district officials, as appropriate.

We agree with the recommendation. However, as was pointed out in our initial responses to the preliminary findings for both the Hyde Park and Queensbury School districts, the problem of occupancy without proper Certificates of Occupancy (CO) was noted over a year before the audit began. Various steps were put in place to alleviate the problem. In this regard it must be noted again that the buildings in question at Hyde Park and Queensbury were occupied prior to these changes. Also, we have never received the referenced list of 25 buildings, or an indication of any building code violations which were noted. Such a list was requested at the exit conference. Therefore, we are unable to verify that 14 buildings were occupied without COs prior to the revised process.

The application for approval of final plans and specifications now requires the anticipated date of substantial completion to be noted. Approximately, two months prior to this date the office computer network will identify affected buildings and the districts will be notified of the necessity of a CO prior to occupancy. At this time a series of assurances, described in Recommendation #3, will also be sent. These assurances must be signed at the time of substantial completion and submitted to the Education Department together with the Certification of Substantial Completion form. This notification is in addition to instructions given at the time the project is initiated and again at the time the building permit is issued.

Recommendation #8. Ensure that school districts are aware of the correct procedures to follow for obtaining a certificate of occupancy prior to occupying new construction.

We agree with the recommendation. Districts are already advised of correct procedures at the time of inception of a project, at the time of issuance of the building permit, and as described in Recommendation #7. They will also be advised as the anticipated date of substantial completion approaches.

Recommendation #9. Require that school districts submit appropriate documentation to support building costs reported on the final cost reports.

We disagree with the recommendation. Because of current staffing levels and the expectation of no increase in staff to review final cost reports, it would be pointless to require submission of voluminous quantities of receipts and invoices and other supporting documentation for final cost reports for 1,600 to 2,500 projects annually. This is not to say that there is no need for school districts to be able to document building costs. We believe our response to Recommendation #10 outlines a viable solution.

page 13, first paragraph. School districts do not have to submit a final cost report to receive State Building Aid. Rather, as the project progresses the district submits a claim to the Office of State Aided Programs and receives aid on an estimated basis. The final determination of aid by the Office of State Aided Programs follows approval of the final cost report.

page 13, first paragraph - The Education Department does ensure that only eligible expenses are included in the approved final cost report. We compare the application for approval of final plans and specifications, the project description form, State Aid form #SA-4, all change orders, and other associated correspondence, with the expenses listed on the final cost report in order to determine if all costs reported are eligible for aid. Those expenditures that are not eligible for aid are disallowed and deducted from the total cost reported for the project; or the school district is sent a letter concerning questionable expenses. A determination of eligibility for aid is then based on the school district's response.

page 13, third paragraph - There is no way of knowing whether or not expenses from one project are reported on another project in order to avoid an over-expenditure of the initial project, unless the expenditures listed on the second project are obviously not within the scope of the second project. This is particularly true when, as was the case with Hyde Park, we had not yet received the final cost report for the second project. That final cost report was not received until May 7, 1993.

page 14, first full paragraph - With reference to Hyde Park, Education Department staff did not identify the initial transfer of expenditures because NO final cost report was on hand for the other project at the time of the auditor's review. Additionally, possession of a copy of the construction contracts would add nothing to the Department's information.

Recommendation #10. Develop procedures to periodically review the supporting documentation for selected districts' claims to ensure that unrelated and unnecessary expenses are not claimed for reimbursement.

We agree with the recommendation. However, it would be impossible to perform such periodical reviews with existing staff. Therefore, we will seek approval of funds to allow contracting with independent auditors to conduct field audits or desk audits at the Department for selected projects for which the involved districts will be asked to submit supporting documentation for expenditures reported on the final cost reports. We propose to request authorization to review up to 10 projects annually.

Recommendation #11. Recover State building aid payments made to school districts for non-eligible expenses.

We agree with the recommendation. However, it is unnecessary. Currently, eligible and ineligible expenses on the final cost report are reported by Facilities Planning to State Aided Programs. They then appropriately adjust the State aid payments to the district. Since the process proposed in Recommendation #10 occurs prior to final action on the Final Cost Report, there will always be opportunity for adjustment.

page 14, second full paragraph - It is beyond the responsibility of the Department to ascertain if claimed expenses are necessary to complete a project. This is appreciably different than determining if an expense is eligible for aid.

page 14, last paragraph - The Education Department has no information concerning a $6,000 expenditure for science equipment. The final cost report for the South Colonie project has no notation of $6,000 for science equipment. There are expenses noted for equipment, which is proper in view of the fact that the project was for a "high school gymnasium addition, (and) reconstruction associated with addition and classroom relocation."

page 15, first full paragraph - The Education Department has no information concerning charging of portions of the salary of the high school clerk of the works to the elementary school project. Short of the district reporting such an improper expenditure there is no practical or reasonable methodology to identify such an impropriety. An air conditioner is an eligible expense, particularly for a computer room, as are tables and chairs for new teaching areas.

page 15, second full paragraph - As previously stated planning inefficiencies as described are beyond the scope of review of the bureau. These really result from lack of communication between the district and their architect as to what is required and/or what is furnished. Undoubtedly the district paid for the labor to remove and replace small chalkboards with larger ones, so that only a portion of the $8,000 additional cost was for the increase in size.

page 15, last paragraph - The report eludes to a risk of the Department providing building aid for ineligible expenditures, but really does not address what might be a reasonable cost - benefit relationship in attempting to identify improper expenses. Clearly the Department cannot make any substantial progress on the perceived problem given current staffing and financial resources. We believe the procedure described in Recommendation #10 can be beneficial. However, we must point out that the efforts of this audit identified probable improper costs of some $6,000 for (science?) equipment, something less than $8,000 for chalkboards, $17,000 for salary which the audit says did not result in increased building aid, and something less than $12,000 for (library?) tables — for a total of something around $30,000 representing $15,000± of building aid assuming a 50% average aid ratio — out of eight projects costing almost $15,000,000.

Recommendation #12. Encourage school districts to use some form of vendor competition when obtaining professional services for construction projects.

We agree with the recommendation. We will inform school districts that the use of some form of vendor competition is recommended similar to subsection 8.0060 of the Office of the State Comptroller Financial Management Guide. Since such competition is not required by the General Municipal Law, it would be at the option of each school district.